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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/698,189

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Ran M. Oz

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RECHES PATENTS

211 North Union St.

Suite 100

Alexandria, VA 22314

EXAMINER

SAINT CYR, JEAN D

ART UNIT

PAPER NUMBER

2425

NOTIFICATION DATE

DELIVERY MODE

05/09/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/698,189	<b>Applicant(s)</b> OZ ET AL.	
	<b>Examiner</b> JEAN Duclos SAINT CYR	<b>Art Unit</b> 2425	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-9 and 11-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 11-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### **Response to Amendment**

This action is in response to applicant's amendment filed on 02/13/2011. Claims 1, 3-9, 11-27 are still pending in the current application. Claim 28 is added.

### **Response to Arguments**

Applicant's arguments with respect to the pending claims were fully considered, but they were not persuasive. With respect to claims 1, 9 and 19, applicant argues that the cited references did not disclose online generating by the video pump, in response to a request to receive a trick play media stream, a non-live media stream, by utilizing the media related information; wherein the generating comprises fetching intra-coded frames from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames

However, Dygert et al disclose that user can perform actions on these video streams, such as pause, play, stop, fast forward, rewind, col.6, lines 8-9; start and stop addresses and start and stop commands are sent to RAID streaming logic, col.6, lines 50-51; according to this information user is capable of sending trick mode request to the video pump.

And weaver show in fig.1, a prefetch unit that allows the system to search for access point in the stream when a request for fast forward and fast rewind is received. Also, during the fast forward process, the system can read the frames X and Y during

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the time associated only with frame X. This proves that there is an alteration on the timing. Finally, the duplicating frames appear when a request for fast forward and fast rewind is sent and without duplicating frames, users will be unable to read anything during fast forward and fast rewind. As disclosed in the current application, the duplicating frames are associated with fast forward and fast rewind.

With respect to claims 3, 11 and 16, applicant argues that cited references did not disclose providing the live media stream to multiple users wherein the live media stream reaches the video pump only once.

However, Dygert et al show in fig.1 a video pump that is connected to a server 14 receiving video from service provider via interface Ultra/SCSI and a plurality of set top devices are connected to the video pump for requesting channel in real time and the video pump transmits video data according to request received from users. The server 14 is capable of broadcasting a maximum of sixty channels simultaneously and in real time.

With respect to claims 5, 13, 17, 8, 18; applicant argues that the cited references did not disclose the data structures comprise an indexing file that comprises a duplicating frame and locations of the intra-coded frames ; wherein an amount of duplicating frames to be transmitted between each pair of intra-coded frames determines a presentation

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rate of the non-live media stream. Finally, the applicant amends claim 19 to overcome the 101 rejection.

However, Weaver et al show in fig.2a; a structure of an MPEG-2 transport file with tag data to locate video frame, col.3, lines 17-18; col.14, lines 8-11; col.11, 37-49; col.11, lines 31-40; , yeahcol.6, lines 63-65 and there are an indication of access point associated with each and bit rate associated with the transmission of a frame during fast forward and fast rewind in order to avoid buffer overflow; col.2, lines 60-61; col.7, line 53; col.14, lines 8-11; col.11, 37-49; col.11, lines 31-40; col.3, lines 27-29; ,col.8, lines 7-9; col.2, lines 26-38; according to this info there is a limitation in the amount of duplicating frames to be transmitted. As a result, this action is made Final.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 1, 3-9, 11-21, 23-25, 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dygert et al in view of Weaver et al, US No.6119154 .

Re claim 1, Dygert et al disclose receiving live media streams at a first path, wherein the first path comprises a video pump coupled to a data acquisition unit(see fig.2 where the video pump is directly connected to a Raid Array representing a server or a buffer; The purpose of video pump 12 is to retrieve MPEG audio/video streams from various storage devices, such as RAID array 14 and DVD jukebox, col.5, lines 43-45; col.10, lines 28-31);

providing a live media stream from the first path to a client, in response to a request to provide the live media stream to the client(Video pump responds to system commands from system control server 22 for the retrieval and distribution of isochronous data including both audio and video, col.5, lines 52-54; col.3, lines 54-61; live broadcasts, col.1, line 49);

retrieving media related information that comprises data structures that assist in constructing non-live media streams(Video pump receives via the commands, the start and stop addresses of the data within a given file that is to be streamed through ATM network, col.6, lines 4-28; col.6, lines 51-51);

online generating by the video pump, in response to a request to receive a trick

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play media stream, a non-live media stream, by utilizing the media related information(perform actions on these video streams, such as pause, play, stop, fast forward, rewind, col.6, lines 8-9; start and stop addresses and start and stop commands are sent to RAID streaming logic, col.6, lines 50-51),

providing the non-live media stream from a second path to the client, wherein the second path comprises the video pump and a media server being coupled to each other by a network link that differs from a network link of the first path(see fig.2 where video pump is coupled to a DVD Jukebox using a different path; col.6, lines 8-9).

But did not explicitly disclose wherein the generating comprises fetching intra-coded frames from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames.

However, Weaver et al disclose wherein the generating comprises fetching intra-coded frames from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames(see fig.1, prefetch unit; col.15, lines 51-59; col.15, lines 65-67; fast forward the feed at different times, each would require a separate non-linear digital editor, col.2, lines 60-61; indicators of video access points, time stamps, col.7, line 53; prefix data is data that prepares the client to receive digital audio-visual data from the specified location in the digital audio-visual file, col.14, lines 8-11; col.11, 37-49; col.11, lines 31-40; by reading

frames X and Y during the time associated with frame X means that timing was altered; the duplicating frames appear when a request for fast forward and fast rewind is sent).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Weaver into the invention of Dygert for the purpose of reducing delay in displaying non-linear video.

Re claim 3, Dygert et al disclose comprising providing the live media stream to multiple users wherein the live media stream reaches the video pump only once(see fig.2; Video pump responds to system commands from system control server 22 for the retrieval and distribution of isochronous data including both audio and video,col.5, lines 52-54; col.6, lines 4-6).

Re claim 4, Dygert et al disclose wherein the media related information comprises information indicative of a location of a stored media stream and wherein the generating of a non-live media stream further comprises a determination of which frames of the stored media stream to fetch from the first path(see fig.2, video scene database; Video pump receives via the commands, the start and stop addresses of the data within a given file that is to be streamed through ATM network, col.6, lines 4-28; RAID streaming logic fetches data from RAID array . This data is placed in DRAM buffer 35 where it is read by real-time pump, col.6, lines 57-59).

Re claim 5, Dygert et al did not explicitly disclose wherein the data structures



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comprise an indexing file that comprises a duplicating frame and locations of the intra-coded frames .

However, Weaver et al disclose wherein the data structures comprise an indexing file that comprises a duplicating frame and locations of the intra-coded frames (see fig.2a; referring to FIG. 2a, it illustrates the structure of an MPEG-2 transport file, col.6, lines 63-65; tag data locations of video frame, col.3, lines 17-18; col.14, lines 8-11; col.11, 37-49; col.11, lines 31-40).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Weaver into the invention of Dygert for the purpose of reducing delay in displaying non-linear video.

Re claim 6, is met as previously discussed with respect to the rejection of claim 5.

Re claim 7, Dygert et al disclose further comprising a step of providing a live media stream from the first path to a client, in response to a request to provide a slightly delayed media stream to the client(see fig.2, first path between video pump and Raid Array; Video pump responds to system commands from system control server 22 for the retrieval and distribution of isochronous data including both audio and video, col.5, lines 52-54; deliver each bit from the encoder to the decoder with a constant delay, col.1, lines 36-38) .

Re claim 8, Dygert et al did not disclose wherein an amount of duplicating frames to be transmitted between each pair of intra-coded frames determines a presentation rate of the non-live media stream further comprising converting live media streams to non live media streams.

However, Weaver et al disclose wherein an amount of duplicating frames to be transmitted between each pair of intra-coded frames determines a presentation rate of the non-live media stream further comprising converting live media streams to non live media streams(see fig.1, prefetch unit; col.15, lines 51-59; col.15, lines 65-67; fast forward the feed at different times, each would require a separate non-linear digital editor, col.2, lines 60-61; indicators of video access points, time stamps, col.7, line 53; col.14, lines 8-11; col.11, 37-49; col.11, lines 31-40; a request is received for non-sequential access to the content data by the client, col.3, lines 27-29; bit rate ,col.8, lines 7-9; col.2, lines 26-38 ).

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Weaver into the invention of Dygert for the purpose of reducing buffer overflow during VCR function mode.

As claim 9, the claimed “ a system for providing media streams, the system

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comprising: a first path comprising a video pump coupled to a data acquisition unit; wherein the first path is utilized for receiving live media streams and for providing a live media stream to a client, in response to a request to provide the live media stream to the client...; wherein the generating comprises fetching intra-coded frame from locations that are pointed to at the media related information, and altering timing information of the intra-coded frames and of duplicating frames...” is composed as the same structural elements as previously discussed with respect to the rejection of claims 1.

Re claim 11, Dygert et al disclose wherein the video pump is arranged to provide the live media stream to multiple users wherein the live media stream reaches the video pump only once (see fig.2 where a plurality of set top boxes are connected to the network; col.5, lines 52-54; col.6, lines 4-6) .

Re claim 12, Dygert et al disclose wherein the first path comprises the video pump (see fig.2).

Re claim 13, is met as previously discussed with respect to the rejection of claim 5.

Re claim 14, is met as previously discussed with respect to the rejection of claim 6.

Re claim 15, Dygert et al disclose further comprising a step of providing a live media stream from the first path to a client, in response to a request to provide a slightly

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delayed media stream to the client(see fig.2, first path between video pump and Raid Array; Video pump responds to system commands from system control server 22 for the retrieval and distribution of isochronous data including both audio and video, col.5, lines 52-54; deliver each bit from the encoder to the decoder with a constant delay, col.1, lines 36-38).

As claim 16, the claimed "a system for providing media streams, the system comprising: an acquisition unit coupled to a media source; a media storage and management entity; a video pump interface, coupled to the output of the acquisition unit via a first path...; a video pump that is operable to determine which data to fetch from the media storage and management entity and when to transmit it according to MPEG timing..." is composed as the same structural elements as previously discussed with respect to the rejection of claims 1 and 3.

Re claim 17, is met as previously discussed with respect to the rejection of claim 5.

Re claim 18, is met as previously discussed with respect to the rejection of claim 8.

As, claimed 19, the claimed "a non-transitory computer readable medium having code embodied therein for causing an electronic device to perform the steps of: receiving live media streams at a first path, wherein the first path comprises a video pump coupled to a data acquisition unit...; wherein the generating comprises fetching intra-coded frame from locations that are pointed to at the media related information,

and altering timing information of the intra-coded frames and of duplicating frames...” is composed as the same structural elements as previously discussed with respect to the rejection of claims 1.

Re claim 20, Dygert et al disclose wherein the generating comprises generating at least the portion of the non-live media stream by converting the live media stream to provide at least the portion of the non-live media stream (perform actions on these video streams, such as pause, play, stop, fast forward, rewind, col.6, lines 8-9; by performing these actions, the live stream is transformed to non-live stream).

Re claim 21, Dygert et al disclose wherein the receiving further comprises receiving a live media stream from a first media source, and wherein the retrieving comprises retrieving media related information from a second media source that is different from the first media source(see fig.2).

Re claim 23, is met as previously discussed with respect to the rejection of claim 8.

Re claim 24, Dygert et al disclose wherein the second path is further operable to generate at least the portion of the non-live media stream by converting the live media stream to provide at least the portion of the non-live media stream (see fig.2; perform actions on these video streams, such as pause, play, stop, fast forward, rewind, col.6,

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lines 8-9; by performing these actions, the live stream is transformed to non-live stream).

Re claim 25, Dygert et al disclose wherein the first path is operable to receive a live media stream from a first media source, and wherein the second path is further operable to retrieve media related information from a second media source that is different from the first media source(see fig.2, video scene database; Video pump receives via the commands, the start and stop addresses of the data within a given file that is to be streamed through ATM network, col.6, lines 4-28; RAID streaming logic fetches data from RAID array . This data is placed in DRAM buffer 35 where it is read by real-time pump, col.6, lines 57-59).

Re claim 27, Dygert et al disclose wherein the media storage and management entity is adapted to convert a live media stream to a non-live media stream that substantially includes the intra coded frames of at least a portion of the live media stream, and duplicating frames (see fig.2; perform actions on these video streams, such as pause, play, stop, fast forward, rewind, col.6, lines 8-9; by performing these actions, the live stream is transformed to non-live stream).

Re claim 28, Dygert et al disclose wherein the first path comprises the video pump(see fig.2).

Claims 22, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dygert et al in view of Weaver further in view of Zimmermann et al, US No. 20030161302.

Re claim 22, Dygert et al did not explicitly disclose further comprising storing non-live media streams at the video pump, providing a first portion of the non-live media stream from the video pump to the client, and providing a second portion of the non-live media stream from the media server, wherein the generating comprises generating the second portion of the non-live media stream.

However, Zimmermann et al disclose each of the plurality of nodes may be to store segments of the data stream and to transmit the segments of the data stream in a sequence according to a scheduler module on the respective node, 0026.

It would have been obvious for any person of ordinary skill in the art at that time the invention was made to incorporate the teaching of Zimmermann into the invention of Dygert as modified by Weaver for the purpose allowing the system to receive segments of the same content from different servers.

Re claim 26, is met as previously discussed with respect to claim 22.

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Duclos Saintcyr whose phone number is 571-270-3224. The examiner can normally reach on M-F 7:30-5:00 PM EST. If attempts to reach the examiner by telephone are not successful, his supervisor, Brian Pendleton, can be reached on 571-272-7527. The fax number for the organization where the application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, dial 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jean Duclos Saintcyr /

/Brian T Pendleton/

Supervisory Patent Examiner, Art Unit 2425